What is Claimed is:

1. An optical attenuator which includes an attenuating section arranged between a receiving waveguide coaxial with a receiving optical fiber and a transmitting waveguide coaxial with a transmitting optical fiber to attenuate the intensity of light emitted from the receiving waveguide to the transmitting waveguide, comprising:

an actuator for driving a movable section across the propagation of light, the attenuating section being arranged in the movable section;

an inner housing including a cover mounted with the receiving and transmitting waveguides in an underside thereof and a body arranged and bonded under the cover, the body having a cavity allowing the receiving and transmitting waveguides to be arranged without interference;

an outer housing containing and surrounding the inner housing to protect the same; and

a calibrating section for generating attractive force from above the cover to pull the movable section against the latitudinal deformation thereof so that optical axes of the attenuating section and the receiving and transmitting sections are coaxially aligned.

2. The optical attenuator according to claim 1,

wherein the calibrating section includes a thin metal layer formed in an upper face of the cover and a magnet member supported by the outer housing to generate magnetic force for pulling the thin metal layer upward.

3. The optical attenuator according to claim 2, wherein the thin metal layer is a pattern printed on the upper face of the cover.

4. The optical attenuator according to claim 2, wherein the metal thin layer is made of a ferromagnetic material.

5. The optical attenuator according to claim 2, further comprising an anti-oxidation protective layer coated on the upper face of the thin metal layer.

6. The optical attenuator according to claim 5, wherein the protective layer is made of one selected from a group including Ti, Cr, Al, Au and mixtures thereof.

7. The optical attenuator according to claim 2, wherein the metal thin layer is an upper electrode connected with an output terminal of the main board via a wire member using a wire bonding technique.

8. The optical attenuator according to claim 2, wherein the magnet member is a permanent magnet for generating magnetic force toward the cover.

9. The optical attenuator according to claim 8, wherein the permanent magnet includes an adjustment section for shifting the permanent magnet upward or downward to vary the gap between the cover and the permanent magnet, and

wherein the adjustment section includes a predetermined length of a screw for precision adjustment, the screw being meshed into a threaded hole of the outer housing and mounted with the permanent magnet on a leading end thereof, and a control knob arranged in a rear end of the screw.

10. The optical attenuator according to claim 2, wherein the magnet member is an electromagnet capable of varying magnetic force to the cover.

11. The optical attenuator according to claim 10, wherein the electromagnet includes a power supply electrically connected with power-supplying wires, and

wherein the power supply has a control knob for adjusting the quantity of electric power supplied to the wire to vary the strength of magnetic force.

12. The optical attenuator according to claim 2, wherein the calibrating section includes a permanent magnet layer formed on the upper face of the cover to generate a predetermined strength of magnetic force and a metal member supported by the outer housing to pull the permanent magnet layer upward.

13. The optical attenuator according to claim 12, wherein the permanent magnet layer is a pattern printed on the upper face of the cover at a predetermined thickness.

14. The optical attenuator according to claim 12, wherein the metal member is made of a ferromagnetic material.

15. The optical attenuator according to claim 12, further comprising an anti-oxidation protective layer coated on the upper face of the thin metal layer.

16. The optical attenuator according to claim 15, wherein the protective layer is made of one selected from a group including Ti, Cr, Al, Au and mixtures thereof.

17. The optical attenuator according to claim 12, wherein the permanent magnet layer is an upper electrode connected with an output terminal of the main board via a

wire member using a wire bonding technique.

18. The optical attenuator according to claim 12, wherein the metal member includes an adjustment section for shifting the metal member upward or downward to vary the gap between the permanent magnet layer and the permanent magnet, and

wherein the adjustment section includes a predetermined length of a screw for precision adjustment, the screw being meshed into a threaded hole of the outer housing and mounted with the metal member on a leading end thereof, and a control knob arranged in a rear end of the screw.